



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,474	07/16/2003	Darwin Rambo	15019US01	8619
23446 7590 02/21/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER HAN, QI	
			ART UNIT 2626	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/620,474	Applicant(s) RAMBO ET AL.	
	Examiner Qi Han	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. On page 17, paragraph 35, the statement of “the reference speech sample is transmitted to an exemplary first codec 316 where the reference speech sample is digitized” is confused, because it appears to imply that before the codec 316, the reference speech samples is **not** digitized, which conflicts with Fig 3 that suggests the reference speech sample before the codec 316 is digitized. Appropriate correction or clarification is required.
 - b. On page 21, paragraph 46, the statement of “the network interface 364 provides communication interface between the exemplary VoIP gateway processing elements and the voice analysis platform **304**” appears to be incorrect, according to Fig. 3. Appropriate correction or clarification is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9, the recited limitation “capable of ...” is not positive terms, since it unclear that the applicant wants the followed feature to be a definite part of the claimed invention, or only optional feature, so as being indefinite.

Regarding claim 10, the rejection is based on the same reason described for claim 9, because the claim includes the same or similar problematic limitation(s) as claim 9.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-11, 14 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by GOODMAN (US 7173910 B2).

As per **claim 1**, GOODMAN discloses ‘service level agreements based on objective voice quality testing for voice over IP (VOIP) networks’ (title), comprising:

“a voice analysis platform that generates a reference speech sample for transmission into said communication system, said voice analysis platform provides configuration data to instruct at least one signal processing device to provide at least one output of said reference speech sample at a signal processing point within said at least one signal processing device, and said voice analysis platform generates at least one voice quality score based on said at least one

Art Unit: 2626

output”, (Fig 1 and col. 3, lines 5-57, ‘voice quality test probes 14a and 14b’ that ‘are coupled to gateways 16a and 16b (signal processing device)’, ‘the test probes store a sample (speech sample) or reference voice file’ and ‘transmit and receive the reference voice file over the speech path with the VOIP network (communication system)’; col. 7, lines 12-22, ‘all test probes in the network are configured and controlled by the manager’ that ‘stores the consolidated information in a database for analysis’; col. 7, lines 30-60, ‘supports a large number of VOIP Points of Presence (VOIP POPs)’; col. 3, lines 28-29, ‘the test probes also store a software algorithm implementing a perceptual or voice call listening quality test model’, including ‘Perceptual Analysis Measurement System (PAMS)’ and ‘Perceptual Speech Quality Measurement (PSQM)’ that provide objective voice quality scores; wherein either the test probe or combination of the test probes and the manager can be read on the voice analysis platform; also see Figs. 2-3).

As per **claim 4** (depending on claim 1), GOODMAN further discloses “comprising at least one communication software, wherein said at least one communication software comprises a server version of said communication software” (col. 5, line 65 to col. 6, line 3, ‘connected to the gateway 16c is a server 31’, ‘VOIP communication devices includes a VOIP server 34’, which inherently includes server version of communication software; col. 7, lines 12-15, ‘connected to the VOIP network 12 is a management server (or manager) 44’, ‘all test probes in the network 30 are configured and controlled by the manager 44’ which inherently includes server version of communication software, otherwise the server cannot operate the controls).

As per **claim 5** (depending on claim 1), GOODMAN further discloses “comprising at least one communication software, wherein said at least one communication software comprises a client version of said communication software” (col. 5, lines 34-45, ‘the test probes 14 further

Art Unit: 2626

include the necessary hardware and software required to support applicable network layer protocols', wherein the software is read on client version of said communication software; col. 7, lines 12-15, 'connected to the VOIP network 12 is a management server (or manager) 44', 'all test probes in the network 30 are configured and controlled by the manager 44', wherein the test probe inherently includes software for responding the server's controls).

As per **claim 6** (depending on claim 1), GOODMAN further discloses "said voice analysis platform is configured to transmit and receive said at least one reference speech sample" (as stated above; also see col. 3, lines 52-57)

As per **claim 7** (depending on claim 1), GOODMAN further discloses "said at least one signal processing device comprises a voice over IP gateway" (Figs. 1-3)

As per **claim 8** (depending on claim 1), the rejection is based on the same reason described for claim 4, because the rejection for claim 4 covers the same or similar limitations as claim 8.

As per **claim 9**, the rejection is based on the same reason described for claim 1, because the rejection for claim 1 covers the same or similar limitations as claim 9.

As per **claim 10**, the rejection is based on the same reason described for claim 1, because the rejection for claim 1 covers the same or similar limitations as claim 10.

As per **claim 11**, it recites a method. The rejection is based on the same reason described for claim 1, because the claim recites the same or similar limitations as claim 1.

As per **claim 14** (depending on claim 11), GOODMAN further discloses "determining said one or more outputs of a signal processing element of a gateway within said communication

Art Unit: 2626

system in which to capture said reference speech samples” (as stated for claim 11 (or claim 1); also see col. 6, lines 1-46 and col. 7, lines 12-15; Figs. 1-3, TP1, TP2, TP3).

As per **claim 17**(depending on claim 11), the rejection is based on the same reason described for claim 2, because the claim recites the same or similar limitations as claim 2.

As per **claim 18**, it recites a method. The rejection is based on the same reason described for claim 1, because the claim recites the same or similar limitations as claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 12-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over GOODMAN in view of BAUER et al. (US 2005/026189 A1) hereinafter referenced as BAUER.

As per **claim 2** (depending on claim 1), GOODMAN does not expressly disclose “a display to provide a graphical diagram of said communication system indicating said at least one voice quality score”. However, this feature is well known in the art as evidenced by BAUER who discloses ‘methods and devices for correlating audio sample comparisons and network performance statistics’ (title), comprising ‘methods and devices evaluating audio (e.g. voice) quality in a network’ and displaying the ‘results’ and ‘statistics’ ‘in a user-friendly graphical user interface (GUI)’ (paragraph (hereinafter referenced as p) 6), and ‘the information selected for

Art Unit: 2626

display includes the PSQM score' (p44 and Fig.4). BAUER also teaches that the functionality provided by separate elements 'can be combined and/or integrated with the functionality of one or more of the other elements' and 'what is significant is the functionality provided by system (communication system)' (p15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify GOODMAN by providing GUI for displaying various information including voice quality score, as taught by BAUER, for the purpose (motivation) of permit the user to more readily identify any degradation in quality and its cause (BAUER: p7).

As per **claim 3** (depending on claim 2), GOODMAN in view of BAUER further discloses "said graphical diagram graphically associates said at least one voice quality score with said at least one output" (BAUER: Fig. 4; also see above).

As per **claim 12** (depending on claim 11), the rejection is based on the same reason described for claim 2, because the claim recites the same or similar limitations as claim 2.

As per **claim 13** (depending on claim 12), the rejection is based on the same reason described for claim 3, because the rejection for claim 3 covers the same or similar limitations as claim 13.

As per **claim 15** (depending on claim 11), the rejection is based on the same reason described for claim 2, because the rejection for claim 2 covers the same or similar limitations as claim 15.

As per **claim 16** (depending on claim 15), GOODMAN in view of BAUER further discloses "said statistical information comprises an average voice quality score and a variance"

Art Unit: 2626

(BAUER: Fig. 4 shows the statistical information including 'average PSQM' and 'PSQM Std. Deviation (corresponding to equivalent measurement of variance)').

Conclusion

5. Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to: 571-273-8300, (for formal communications intended for entry)

Or: 571-273-8300, (for informal or draft communications, and please label "PROPOSED" or "DRAFT")

If no Mail Stop is indicated below, the line beginning Mail Stop should be omitted from the address.

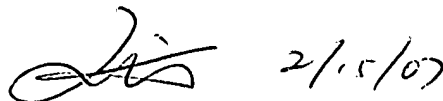
Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

U.S. Patent and Trademark Office
Customer Window, Mail Stop _____
Randolph Building
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (571) 272-7604. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richmond Dorvil, can be reached on (571) 272-7602.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: ebc@uspto.gov. For general information about the PAIR system, see <http://pair-direct.uspto.gov>.

QH/qh
February 15, 2007

Handwritten signature and date 2/15/07